

## HARDSHIP FINANCIAL ASSISTANCE CALCULATION CLEAN WATER FUND PROGRAM

(1) Municipality's Median Household Income =	\$	From: <a href="Y:\Aid\documents\EIF\Forms\ACS 2011 5YR MHIs Places.pdf">Y:\Aid\documents\EIF\Forms\ACS 2011 5YR MHIs Places.pdf</a>
(2) Number Of Residential Users (Households) =		(N) Individual housing units
(3) Total Project Costs =	\$	Engineer's most recent estimate
(4) Ineligible Project Costs =	\$	e.g. laterals or hook-up fees
(5) Grants From Other Sources =	\$	e.g. Rural Development or CDBG
(6) Line (3) minus Line (4) minus Line (5) =	\$	Costs Eligible for CWFP Funding
(7) Parallel Cost Percentage or PCP =	%	
(8) Line (6) times [1 - Line (7)] = *Example below	\$	Industry/Growth Market Costs
(9) Other Market Costs =	\$	
(10) Line (8) plus Line (9) =	\$	Total Market Rate Costs
(11) Line (10) @ 3.500% for 20 years = **See below for steps to follow on calculator	\$	(M) Annual Market Rate Payment
(12) Line (6) minus Line (10) =	\$	(P) Eligible for Below Market Interest Rate
(13) Line (12) @ 2.625% for 20 years = ***See below for steps to follow on calculator	\$	(AT) Annual Below-Market Rate Payment
(14) Estimated Annual Operation, Maintenance & Replacement Costs =	\$	(O)
(15) Residential Flow in Plans & Specs =		
(16) Total Flow in Plans & Specs =		
(17) Line (15) divided by Line (16) =	%	(R) Residential Percentage
(18) Outstanding P+I On Old Wastewater Debt =	\$	Not interim financing for this project
(19) Debt > 10 Years For Ineligibles =	\$	
(20) Line (18) plus Line (19) =	\$	Total Prior Wastewater Debt
(21) Line 20 divided by 20 years = (or by number of years remaining on debt if greater than 20 years).	\$	(W) Annual Prior Debt

\*For example, if the eligible costs are \$100,000 and the PCP is 99%, the equation is  $100,000 \times (1 - 0.99) = \$1,000$ .

\*\*To determine (M), Annual Market Rate Payment, follow these steps on a financial calculator (HP12C or similar):  
Put in amount from Line 10, press PV, type 4.3, press i, type 20, press n, then press PMT, then CHS.

\*\*\*To determine (AT), Annual Below-Market Rate Payment, follow these steps on a financial calculator: Put in  
amount from Line 12, press PV, type 2.365 or 3.010, press i, type 20, press n, then press PMT, then CHS.

### ***Equation for Determining Eligibility***

$$S = \frac{(AT + M + O + W) * R}{(MHI) * (N)} \quad \text{where}$$

S is the residential wastewater treatment charges as a percent of MHI  
AT is the annual CWFP below-market interest rate payment (Line 13, page 1)  
M is the annual CWFP market rate payment (Line 11 above)  
O is the annual operation, maintenance, and replacement costs for entire system (Line 14, page 1)  
W is the annual prior debt and debt for > 10 years for ineligible (Line 21, page 1)  
R is the residential percentage (Line 17, page 1)  
MHI is the adjusted median household income (Line 1, page 1)  
N is the number of residential users (Line 2, page 1)

**Step 1.** Line 13 \_\_\_\_\_ + Line 11 \_\_\_\_\_ + Line 14 \_\_\_\_\_  
+ Line 21 \_\_\_\_\_ = \_\_\_\_\_ Answer to Step 1

**Step 2.** Answer to Step 1 \_\_\_\_\_ X Line 17 \_\_\_\_\_ =  
\_\_\_\_\_ Answer to Step 2

**Step 3.** Line 1 \_\_\_\_\_ X Line 2 \_\_\_\_\_ = \_\_\_\_\_ Answer to Step 3

**Step 4.** Answer to Step 2 \_\_\_\_\_ / Answer to Step 3 \_\_\_\_\_ =  
\_\_\_\_\_ S

If S is greater than 2% (.02), the municipality meets the second criterion for hardship financial assistance eligibility. Proceed to the calculation of type and amount of assistance.

If S is 2% (.02) or less, the municipality does not meet the second criterion for hardship financial assistance eligibility but may request a CWFP loan at the regular below-market interest rate.

**Equation for Determining Type of Assistance and Amount**

$$(MHI)(N)(.02) = A$$

$$A / R = B$$

$$B - O - W - M = C$$

$$P / 20 = D$$

$$D - C = H$$

(MHI, Line 1 of Inputs) times (# of Res. Users, Line 2) times (2% or .02) =  
**Amount Residential Users Can Afford =** \$ \_\_\_\_\_ (A)

(Amount Residential Users Can Afford) divided by (Residential %, Line 17) =  
**Amount Entire Municipality Can Afford =** \$ \_\_\_\_\_ (B)

(Amount Municipality Can Afford) minus (O,M&R, Line 14) minus (Prior Debt, Line 21)  
minus (Annual Market Rate Cost, Line 11) =  
**Amt. Muni Can Afford to Pay Annually for CWFP Debt Service =** \$ \_\_\_\_\_ (C)

(Project Costs Eligible for Below Market Interest Rate, Line 12) divided by (20) =  
**Annual Debt Service at 0% =** \$ \_\_\_\_\_ (D)

(Annual Debt Service at 0%) minus (Amount Municipality Can Afford for CWFP Debt  
Service) = **Annual Grant Amount =** \$ \_\_\_\_\_ (H)

IF (H) IS POSITIVE, THE FOLLOWING EQUATION APPLIES:

(Annual Grant Amount) times (20) = H X 20 =  
**Total Grant Needed to Get to 2% of MHI =** \$ \_\_\_\_\_

70% of Costs Eligible for Below Market Rate Interest =  
Line 12 X .7 = **Maximum Grant =** \$ \_\_\_\_\_

Total Grant Needed to Get to 2% or Maximum Grant, whichever is less = **Total Grant =** \$ \_\_\_\_\_

Line 10 of Inputs section =  
**Total Market Rate Amount =** \$ \_\_\_\_\_

(Total Costs Eligible for CWFP Funding, Line 6) minus (Total Market Amount, Line 10)  
minus (Total Grant above) = **Total 0% Loan =** \$ \_\_\_\_\_

Total Grant + Total Market Rate Amount + Total 0% Loan = **Total Amount of  
Assistance Municipality is Eligible for** (should = Line 6 of inputs section) = \$ \_\_\_\_\_

IF (H) IS NEGATIVE, PERFORM INTEREST RATE CALCULATION ON FINANCIAL CALCULATOR:

- |  |               |
|--|---------------|
| a. Put in amount in (C) above  | -C = Payment  |
| b. Press ENTER   | P = Principal |
| c. Press CHS   | 20 = Term     |
| d. Press PMT   |               |
| e. Put in amount in Line 12 of inputs section (P)                    |               |
| f. Press PV  |               |
| g. Put in the number 20  |               |
| h. Press n   |               |
| i. Press i (Answer is your interest rate on below-market rate costs) |               |